LOUISIANA DEPARTMENT OF WILDLIFE & FISHERIES



OFFICE OF FISHERIES INLAND FISHERIES SECTION

PART VI -C (ARCHIVES)

WATERBODY MANAGEMENT PLAN SERIES

BLACK BAYOU LAKE

AQUATIC VEGETATION TYPE MAPS AND NARRATIVES

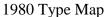
APPENDIX III – Aquatic Vegetation Type Maps (<u>return to aquatic vegetation</u>)

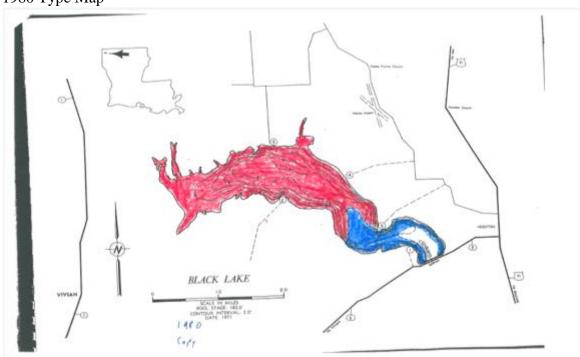
Black Bayou Lake – Aquatic Vegetation Type Map and Narrative – 1980

Black Bayou Lake (Caddo Parish) August 1980

Black Bayou Lake had some heavy to severe infestations of Brazilian elodea (*Egeria densa*) at the time of the survey. The lake was undergoing a drawdown at this time and no further information could be obtained.

Melvin Bagwell Aquatic Specialist





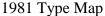
Black Bayou Lake (Caddo Parish) 1981

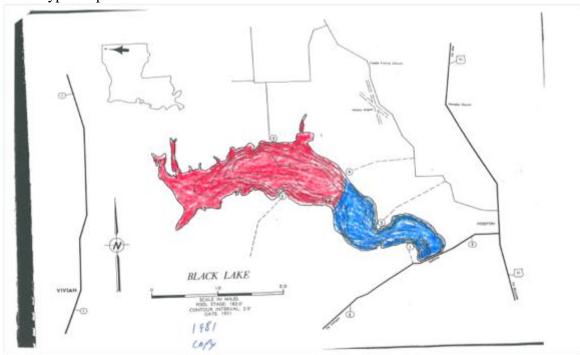
At the time of assessment Black Bayou Lake was at pool stage. Water color varied from clear to stained. Some areas had a plankton bloom while other areas of the lake did not show evidence of a plankton bloom.

The aquatic plants noted were fanwort (Cabomba caroliniana), Brazilian elodea (Egeria densa), coontail (Ceratophyllum demersum), bladderwort (Utricularia spp.), and pondweed (Potamogeton spp.). The infestations of aquatic plants ranged from severe in the upper end to moderate in areas on the lower end of the lake. These infestations were principally fanwort (Cabomba caroliniana) and coontail (Ceratophyllum demersum) with some Brazilian elodea (Egeria densa) in the lower end. The other plants mentioned were not present in sufficient quantities to be problematic.

Duckweed (Lemna spp.) was also noted during the survey.

Melvin Bagwell Aquatic Plant Control Worker III



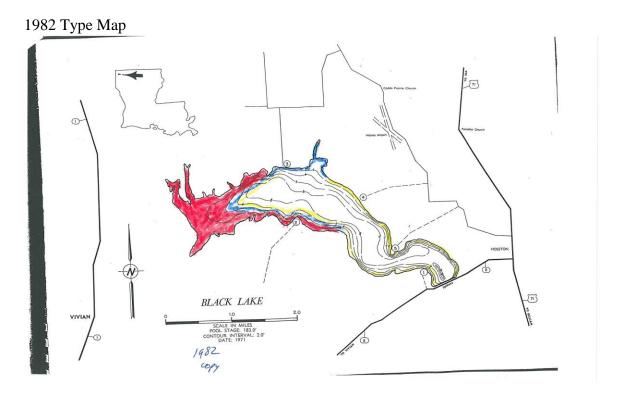


Black Bayou Lake (Caddo Parish) 1982

At the time of the assessment Black Bayou Lake was at pool stage. The color of the water was good. The water had a good plankton bloom.

The marginal and emersed plants noted were cattail (*Typha spp.*), baccharis (*Baccharis spp.*), water lily (*Nymphaea spp.*), spikerush (*Eleocharis spp.*), smartweed (*Polygonum spp.*), sedge (*Cyperus spp.*), and bulrush (*Scirpus spp.*). The lower end of the lake had an infestation of cattail (*Typha spp.*) and water lily (*Nymphae spp.*). The infestation of water lily (*Nymphae spp.*) was light and in one area. The other species mentioned were in very light infestations.

The submersed species noted were Brazilian elodea (*Egeria densa*), fanwort (*Cabomba caroliniana*), coontail (*Ceratophyllum demersum*), bladderwort (*Utricularia spp.*). The upper one third of Black Bayou had a severe to moderate infestation of Brazilian elodea (*Egeria densa*) mixed with fanwort (*Cabomba caroliniana*) and coontail (*Ceratophyllum demersum*). The lower end had little to no plants at all.



Black Bayou Lake (Caddo Parish) 1983

At the time of the assessment Black Bayou was at pool stage. The lower portion of the lake had a good plankton bloom.

The emergent plants noted were cattail (*Typha spp.*), water lily (*Nymphaea spp.*), spikerush (*Eleocharis spp.*), and smartweed (*Polygonum spp.*).

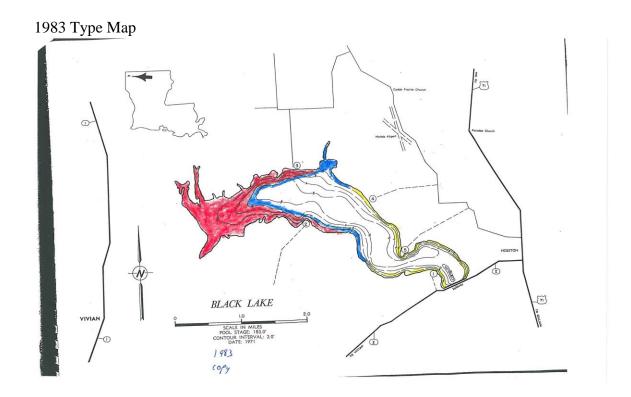
The marginal plants noted were baccharis (*Baccharis spp.*), sedge (*Cyperus spp.*), and bulrush (*Scirpus spp.*).

The emergent and marginal plants were in light infestation and causing no problems.

The submersed species noted were Brazilian elodea (*Egeria densa*), fanwort (*Cabomba caroliniana*), coontail (*Ceratophyllum demersum*), and bladderwort (*Utricularia spp.*).

The upper one third of Black Bayou has a severe to moderate infestation of Brazilian elodea (*Egeria densa*) mixed with fanwort (*Cabomba caroliniana*), and coontail (*Ceratophyllum demersum*).

The lower end of the lake has some light infestations of fanwort (*Cabomba caroliniana*) and bladderwort (*Utricularia spp.*) and in some spots Brazilian elodea (*Egeria densa*).



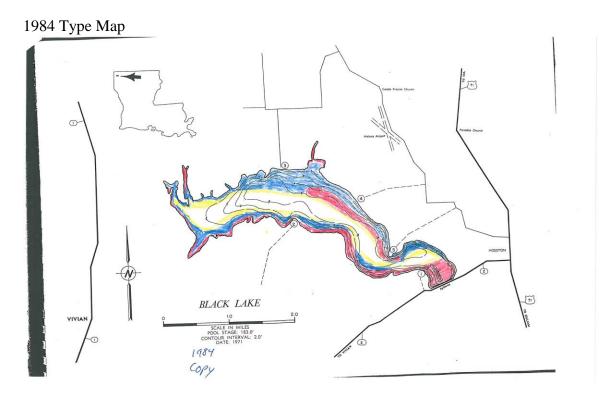
Black Bayou Lake (Caddo Parish) 1984

At the time of the assessment Black Bayou Lake was at pool stage. The water had a fair to poor plankton bloom.

The infestations ranged from severe to light. The severe infestations were almost pure Brazilian elodea (*Egeria densa*), with an occasional sprig of fanwort (*Cabomba caroliniana*). The moderate infestations were all Brazilian elodea (*Egeria densa*). The light infestations were all Brazilian elodea (*Egeria densa*).

The marginal plants noted were cattail (*Typha spp.*), black willow (*Salix nigra*), bulrush (*Scirpus spp.*), maidencane (*Panicum hemitomon*), smartweed (*Polygonum spp.*), and water primrose (*Ludwigia octovalvis*).

In summary Black Bayou Lake is in poor condition. The severe infestations of Brazilian elodea (*Egeria densa*) impedes boating and fishing. Although the plants are a problem the fishermen still catch fish frequently. The marginal plants are in tolerable amounts and causing no problem.



Black Bayou Lake – Aquatic Vegetation Assessment – 1985

Black Bayou Lake (Caddo Parish) August 1985

At the time of assessment Black Bayou was at pool stage. Water clarity ranged from 2 feet in the lower end to 4.5 feet in the upper end.

Aquatic plant infestations ranged from moderate to severe. The severe infestations were comprised almost entirely of Brazilian elodea (*Egeria densa*). The coverage of the plants extended to the 8 foot contour. Although the pants are actively growing all over the entire lake, the extent of Brazilian elodea (*Egeria densa*) coverage diminishes at the edge of the cypress / tupelo forest in the upper half of the lake. The moderate infestations are almost entirely in the upper end of the lake and are comprised primarily of fanwort (*Cabomba caroliniana*) with Brazilian elodea (*Egeria densa*), coontail (*Ceratophyllum demersum*), and bladderwort (*Utricularia spp.*) being secondary plants. There has been a very significant increase in submersed aquatic plants since last year's assessment.

Above narrative is an excerpt from a 1985 vegetation management recommendation by Louie Richardson which has been corrected and edited by James Seales in March, 2012. There has been no accompanying type map found in the files.

Black Bayou Lake (Caddo Parish) 1988

At the time of assessment Black Bayou Lake was at pool stage. The color of the water was good.

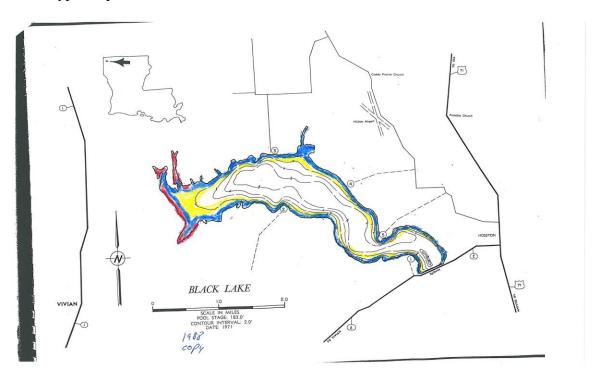
A noticeable plankton bloom was present in most areas. The increase in plankton may be attributed to the increase in fertility caused by dead vegetation.

The submersed aquatic plants noted were Brazilian elodea (*Egeria densa*), coontail (*Ceratophyllum demersum*), bladderwort (*Utricularia spp.*), and southern naiad (*Najas guadalupensis*).

The emersed plants noted were American lotus (*Nelumbo lutea*) and water primrose (*Ludwigia octovalvis*).

In summary Black Bayou Lake is in fair condition. The drawdown in the fall of 1987 has had a great impact on submersed aquatic plants. There has been a significant decrease in Brazilian elodea (*Egeria densa*) and coontail (*Ceratophyllum demersum*) in every area. bladderwort (*Utricularia spp.*) was present in almost all areas but in small amounts.

1988 Type Map



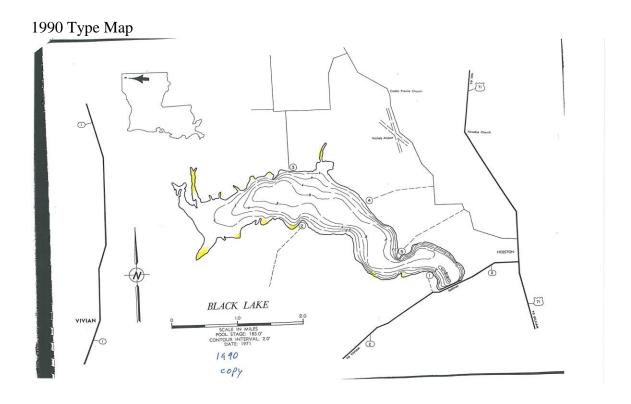
Black Bayou Lake (Caddo Parish) 1990

Black Bayou, Caddo Parish was assessed for aquatic plants in August 1990. At the time of assessment Black Bayou was at pool stage. The water color showed much plankton and in most areas it was a brown color.

Aquatic plant infestations were very sparse. Muskgrass (*Chara spp.*) was the most noted plant and all infestations were light to none existent. Filamentous algae were present in all areas. At this time higher vascular plants were not noted.

In summary the drawdown of the previous year produced an ecological shock that killed off all higher vascular plants. Black Bayou is in very good condition.

Narrative transposed and corrected by James Seales on 7-12-11 from handwritten notes that were likely made by Melvin Bagwell.



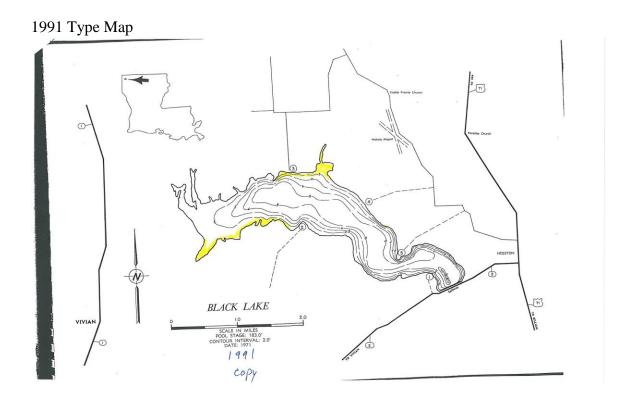
Black Bayou Lake (Caddo Parish) 1991

At the time of assessment Black Bayou was at pool stage. The water had a light amount of turbidity and a very good plankton bloom. The Secchi disc reading was 20 inches.

The submersed aquatic plants noted were coontail (*Ceratophyllum demersum*) and filamentous algae.

The emersed plants noted were cattail (*Typha spp.*), smartweed (*Polygonum spp.*), alligator-weed (*Alternanthera philoxeroides*), and water primrose (*Ludwigia octovalvis*).

In summary Black Bayou Lake has an area of moderately infested aquatic plants in the upper end. The mid and lower portion of Black Bayou Lake had very light infestation. The lake was subjected to flooding in early spring.



Black Bayou Lake (Caddo Parish) 1992

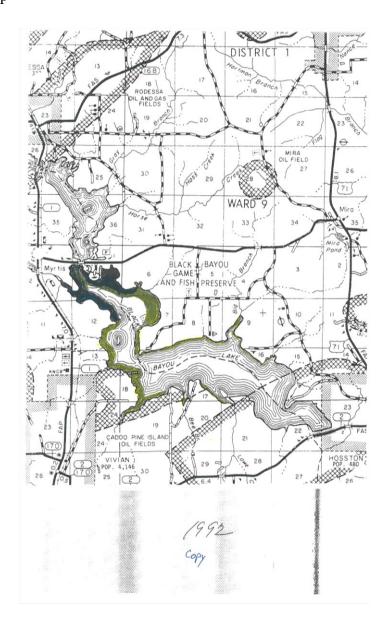
Black Bayou, Caddo Parish, was surveyed for aquatic plants in July 1992.

At the time of the survey Black Bayou was at pool stage. The water color ranged from turbid in lower and mid portion to very clear in the upper end.

The primary aquatic plant noted in Black Bayou was fanwort (*Cabomba caroliniana*). The secondary plants were bladderwort (*Utricularia spp.*), coontail (*Ceratophyllum demersum*), milfoil (*Myriophyllum spp.*) and southern naiad (*Najas guadalupensis*).

The upper end of Black Bayou has had an increase in aquatic plants, primarily fanwort (*Cabomba caroliniana*). Most infestations are in depths of 7 feet, but some plants are out to 9 feet.

Narrative transposed on 7-12-11 and corrected in March 2012 by James Seales from handwritten notes that were likely made by Melvin Bagwell.



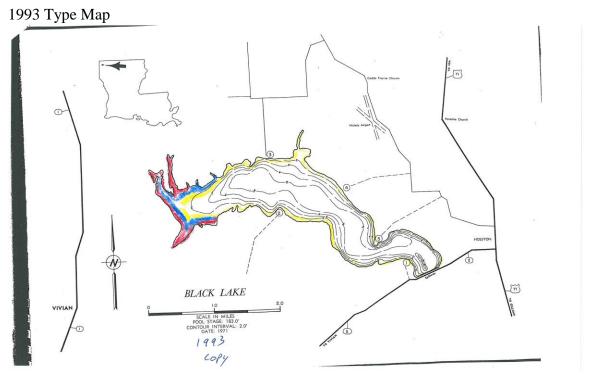
Black Bayou Lake (Caddo Parish) 1993

At the time of assessment Black Bayou (Caddo) was at pool stage. The weather was clear. The water clarity ranged from clear to turbid. The secchi disc reading in the upper end was 84" and in the lower end 55". The pH reading in the upper end was 6.8 and in the lower end 7.1.

The submersed aquatic plants noted were found primarily in the upper end in thick timber. The primary plant in the upper end was fanwort (*Cabomba caroliniana*). The secondary plant was southern naiad (*Najas guadalupensis*) and coontail (*Ceratophyllum demersum*). Most infestations were severe to moderate in the upper end. The mid and lower portion of Black Bayou had very light infestations of southern naiad (*Najas guadalupensis*), coontail (*Ceratophyllum demersum*) and some filamentous algae.

In summary, Black Bayou has a 15% total area infestation. Total infestation is 50% severe, 20% moderate and 30% light.

Narrative transposed on 7-12-11 and corrected March 2012 by James Seales from handwritten notes that were likely made by Melvin Bagwell.



Black Bayou Lake – Aquatic Vegetation Type Map and Narrative – 1994

Black Bayou Lake (Caddo Parish) 1994

At the time of assessment Black Bayou was at pool stage. The water color was green stained and slightly turbid. The secchi disc reading was 40 inches at the dam and 56 inches in the upper end. The pH reading was 7.7.

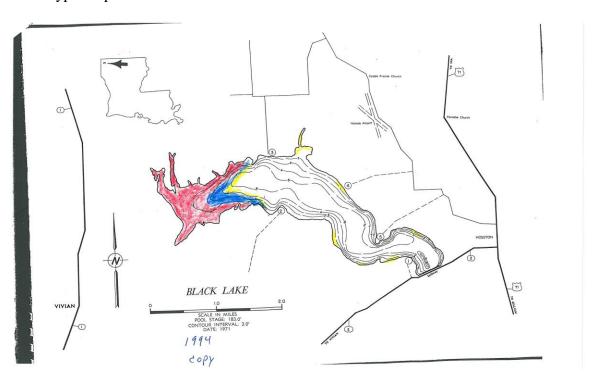
The submerged aquatic plants noted were fanwort (*Cabomba caroliniana*), bladderwort (*Utricularia spp.*), southern naiad (*Najas guadalupensis*), coontail (*Ceratophyllum demersum*), muskgrass (*Chara spp.*), and filamentous algae.

The submersed aquatic plants plant infestations in Black Bayou are principally in the upper one third of the lake. The infestations range from light to severe. The severe infestations are in the extreme upper end.

The plants broke at 8 feet.

Narrative transposed on 7-12-11 and corrected in March 2012 by James Seales from handwritten notes that were likely made by Melvin Bagwell.

1994 Type Map



Black Bayou Lake – Aquatic Vegetation Assessment Narrative – 1995

Black Bayou Lake (Caddo Parish) 1995

No assessment of aquatic plants or sampling was done on Black Bayou in 1995 because of the drawdown situation.

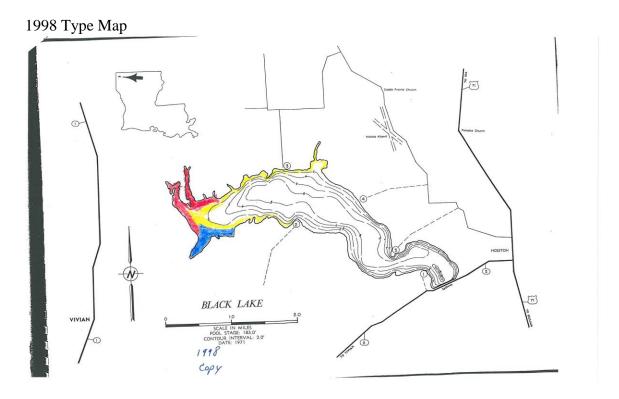
Narrative transposed on 7-12-11 by James Seales from handwritten notes that were likely made by Melvin Bagwell.

Black Bayou Lake (Caddo Parish) 1998

At the time of the assessment Black Bayou was at pool stage. The water color was clear with some turbidity in the upper end.

The submersed aquatic plants surveyed were fanwort (*Cabomba caroliniana*), coontail (*Ceratophyllum demersum*), and bladderwort (*Utricularia spp.*) The floating and emersed plants surveyed were water hyacinth (*Eichhornia crassipes*), duckweed (*Lemna spp.*), fragrant water lily (*Nymphaea odorata*), water primrose (*Ludwigia octovalvis*), smartweed (*Polygonum spp.*) and bulrush (*Scirpus spp.*).

The distribution of aquatic plants in Black Bayou Lake was moderate to severe in the upper end to light in the mid and lower portion. Total infested area was an estimated 15%.

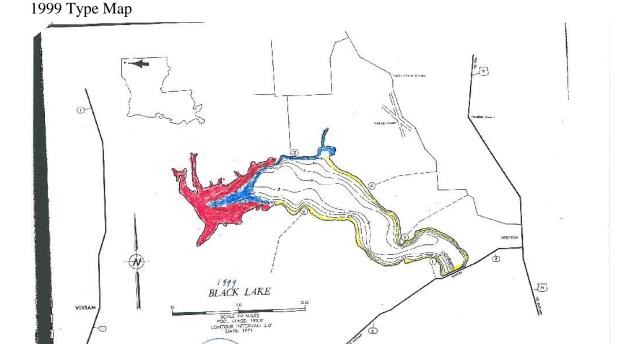


Black Bayou Lake (Caddo Parish) 1999

At the time of the assessment Black Bayou Lake was at pool stage. The color of the water was clear.

The submersed aquatic plants noted were bladderwort (*Utricularia spp.*), fanwort (*Cabomba caroliniana*), coontail (*Ceratophyllum demersum*), and southern naiad (*Najas guadalupensis*). The infestations of submersed aquatic plants were light in the lower end and middle portion and moderate to severe in the upper end.

The emersed aquatic plants noted were water hyacinth (*Eichhornia crassipes*), fragrant water lily (*Nymphaea odorata*), smartweed (*Polygonum spp.*), water primrose (*Ludwigia octovalvis*), and cattail (*Typha spp.*). The infestations of these plants were light and marginal in all areas. The infestation of water hyacinth (*Eichhornia crassipes*) was moderate in the middle portion of the lake.



Black Bayou Lake – Aquatic Vegetation Assessment Narrative – 2000

Black Bayou Lake (Caddo Parish) 2000

The Aquatic Plant Section of LDWF conducted an aquatic weed survey on Black Bayou Lake on June 14, 2000. Aquatic plant infestations ranged from moderate to severe. Submerged aquatic plants infested approximately 35% to 40% of the lake with fanwort (*Cabomba caroliniana*), bladderwort (*Utricularia spp.*), coontail (*Ceratophyllum demersum*), and southern naiad (*Najas guadalupensis*), being the most abundant species. The infestation was more severe on the north side of the lake within the standing cypress timber and shallow water zone (5 feet or less). The portion of Black Bayou Lake north of the bridge crossing on Mira – Myrtis road had a 90% to 100% infestation of submerged aquatics outside the main channel going north. Many camp owners along the eastern shoreline are having access problems due to water hyacinth (*Eichhornia crassipes*), alligator-weed (*Alternanthera philoxeroides*), water primrose (*Ludwigia octovalvis*), and duckweed (*Lemna spp.*) congesting the boat roads. Water hyacinth (*Eichhornia crassipes*) covers approximately 20% of the surface of the lake.

At the time of the survey, Black Bayou Lake had an estimated 60% of its water surface available for fishing and other water oriented recreational opportunities. Submerged aquatic macrophytes were generally confined to waters 5 feet or less in depth. No stands of aquatic macrophytes were observed in waters deeper than 6 feet.

Above text excerpted from a Black Bayou Lake drawdown proposal written by Malcolm Leatherman in July of 2000. The text was excerpted, edited and corrected by James Seales in March of 2012. It is not certain as to who conducted the field survey. No associated type map has been found in the files.